

In the claims:

1. (Currently amended) A method of using a pharmaceutical dispensing apparatus including a fluid dispenser having a piezoelectric fluid ejection device or a thermal fluid ejection device to substantially accurately dispense a pharmaceutical, which includes an active pharmaceutical ingredient dissolved in a vehicle, at a predetermined dosage that is substantially reproducible within a variation in reproducibility relative standard deviation of less than about 15%, wherein the vehicle is configured to, or exposed to conditions sufficient to substantially prevent instability of the active pharmaceutical ingredient during the dispensing of the pharmaceutical.
2. (Currently amended) The method of claim 1 wherein the pharmaceutical includes an active pharmaceutical ingredient is substantially highly concentrated and is which is considered to be substantially high potent, and of applied in a substantially low volume dosage.
3. (Original) The method of claim 2 wherein the ingredient is digoxin.
4. (Original) The method of claim 3 wherein a variation in content uniformity of the pharmaceutical is less than about 15% for dosages of about 1.5 mg per dose of digoxin.
5. (Currently amended) The method of claim 1 wherein the pharmaceutical is capable of being dispensed onto at least two mediums, and wherein the relative standard deviation variation of reproducibility is less than about 15% for the predetermined dosage between the at least two mediums.
6. (Currently amended) The method of claim 1 wherein drops from the piezoelectric fluid ejection device or the thermal fluid ejection device are used to prepare a tablet with about a 0.125 mg dosage of digoxin.

7. (Currently amended) The method of claim 6 wherein the drops from the piezoelectric fluid ejection device or the thermal fluid ejection device have a concentration of about 200 mg/ml, and a drop volume of about 30 pL per drop.

8. (Currently amended) The method of claim 1 wherein the relative standard deviation variation in reproducibility is in a range of about 5% to about 9%.

9. (Currently amended) The method of claim 8 wherein the relative standard deviation variation in reproducibility is in a range of about 5.7% to about 8.2%.

10. (Currently amended) The method of claim 9 wherein the relative standard deviation variation in reproducibility is in a range of about 7% to about 7.5%.

11. (Currently amended) A method of accurately reproducing fluid jet drops of an active pharmaceutical ingredient dissolved in a vehicle from a piezoelectric fluid ejection device or a thermal fluid ejection device of a pharmaceutical dispensing apparatus at a predetermined dosage with a variation in reproducibility of less than about 15%, wherein the vehicle is configured to, or exposed to conditions sufficient to substantially prevent instability of the active ingredient during the reproducing of the fluid jet drops.

12. (Original) The method of claim 11 wherein the drops are dispensed onto a medium.

13. (Original) The method of claim 12 wherein a concentration of the active pharmaceutical ingredient remains substantially constant from media to media with a deviation of less than about 15%.

14. (Currently amended) The method of claim 11 wherein the active pharmaceutical ingredient is substantially highly ~~potent~~ concentrated and is applied in a substantially low volume of a low dosage.

15. (Original) The method of claim 11 wherein the ingredient is digoxin.

16. (Original) The method of claim 11 wherein the variation in reproducibility is in a range of about 5% to about 9%.

17. (Original) The method of claim 11 wherein the variation in reproducibility is in a range of about 5.7% to about 8.2%.

18. (Original) The method of claim 11 wherein the variation in reproducibility is in a range of about 7% to about 7.5%.

19. (Currently amended) A method of testing piezoelectric and thermal fluid ejection devices to evaluate dispersion accuracy, reproducibility and repeatability of pharmaceutical dosages, comprising:

preparing about 200 mg/ml of a first solution of solvent of 2-P:EtOH 80:20 (V/V) and an active pharmaceutical ingredient;

firing a first fluid ejection device to eject the solution onto a first strip;

washing the strip with DI water to form a second solution;

UV analyzing the second solution;

cleaning an orifice plate of the first device after a period of time; and

repeating the above steps.

20. (Original) The method of claim 19 wherein the film is aluminum and coated with Teflon®.

21. (Original) The method of claim 19 wherein the orifice plate is cleaned after 2 hours.

22. (Original) The method of claim 19 wherein at least two fluid ejection devices are fired.

23. (Currently amended) A pharmaceutical dispensing apparatus including a fluid dispenser having a piezoelectric fluid ejection device or a thermal fluid ejection device for dispensing a pharmaceutical solution including an active pharmaceutical ingredient dissolved in a vehicle, comprising:

means for substantially accurately dispensing [[a]] the pharmaceutical solution at a predetermined dosage within a ~~relative standard deviation~~ variation of reproducibility of less than about 15%;

wherein the vehicle is configured to, or exposed to conditions sufficient to substantially prevent instability of the active pharmaceutical ingredient during the dispensing of the pharmaceutical solution.

24. (Currently amended) The device of claim 23 wherein the pharmaceutical ~~includes a substantially high potency, substantially low dosage~~ active pharmaceutical ingredient is substantially highly concentrated and is applied in a substantially low volume.

25. (Currently amended) The device of claim 23 wherein the means for dispensing includes [[an]]the active pharmaceutical ingredient dissolved in [[a]]the vehicle.

26. (Original) The device of claim 25 wherein the ingredient is digoxin.

27. (Currently amended) The device of claim 23 wherein the pharmaceutical solution is capable of being dispensed onto at least two mediums, and wherein the ~~relative~~

~~standard deviation~~ variation of reproducibility is less than about 15% for the predetermined dosage on the at least two mediums.

28. (Currently amended) The device of claim 23 wherein the ~~relative standard deviation~~ variation of reproducibility is in a range of about 5% to about 9%.

29. (Currently amended) The device of claim 23 wherein the ~~relative standard deviation~~ variation of reproducibility is in a range of about 5.7% to about 8.2%.

30. (Currently amended) The device of claim 23 wherein the ~~relative standard deviation~~ variation of reproducibility is in a range of about 7% to about 7.5%.

31. (Original) The device of claim 25, wherein the active pharmaceutical ingredient has a solubility of at least about 30 mg/ml in the vehicle.